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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,673	07/28/2004	Wen-Kei Lee	WISP0051USA	4672

27765 7590 10/19/2005

NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
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EXAMINER

NGUYEN, HIEP

ART UNIT PAPER NUMBER

2816

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary	Application No.	Applicant(s)	
	10/710,673	LEE ET AL.	
	Examiner	Art Unit	
	Hiep Nguyen	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 13-17 is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 10 is objected to because of the following informalities: the recitation “if” on lines 6 and 12 is not a positive recitation. It should be changed to --when--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and clarification is required.

Regarding claim 1, the recitation “... for stopping the boosting circuit from boosting the input voltage” is indefinite because it is misdescriptive. Figures 2 and 4 of the present application shows that when the output voltage (Va) reaches a predetermined voltage, transistor (Q1) is turned off. After discharging through load (Ld) the voltage (Va) of capacitor (Q1) decreases to a lower value, transistor (Q1) is turned on and the booster starts to function again. Therefore, it is not clear what “ for stopping the boosting circuit” is meant by.

Claims 6 and 12 are indefinite because the connections between the elements are confusing. The Applicant is requested to show the first, second and third resistors in the drawing and to show how they are connected to other elements.

Claims 2-5,7-9 and 16-17 are indefinite because of the technical deficiencies of claims 1 and 14.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2816

Claims are rejected under 35 U.S.C. 102(b) as being anticipated by Arakawa (USP. 5,436,550).

Regarding claim 1, figure 7 of Arakawa shows a booster comprising:

a boosting circuit for boosting an input voltage to a pre-determined output voltage;

an oscillator (7) for generating oscillating signals when the boosting circuit boosts the input voltage; and

a voltage detector (C1, R1, R2, 5, 13, 12) electrically connected to circuit for stopping the boosting circuit from boosting the input voltage when the output voltage of the boosting circuit reaches a predetermined voltage (col. 2, lines 20-38).

Regarding claim 10, figure 7 of Arakawa shows a method of boosting battery output, the battery, not shown, electrically connected to a booster comprising a boosting circuit, an oscillator, and a voltage detector, the method comprising:

(a) detecting an output voltage of the booster with the voltage detector (C1, R1, R2, 5, 13, 12);

(b) when the output voltage is lower than a predetermined voltage, with the oscillator generating a periodic pulse signal for controlling a transistor (Q1) of the booster to execute an on/off operation for adjusting the output voltage; and

(c) when the output voltage reaches the predetermined voltage value, with the voltage detector generating a voltage signal whose logic level is zero for turning off the transistor.

Regarding claim 5 and 13, the recitation “ a fuel cell” is merely intended use. Thus, it does not further limit the limitations of the claims. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Therefore, this limitation has not been given patentable weight.

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Allowable Subject Matter

Claims 11, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 11, 12 objected to because the prior art of records (USP. 5,436,550) fails to teach or suggest a method of boosting battery output, the battery, not shown, electrically connected to a booster wherein the booster comprises an AND gate as called for in claim 11.

Claims 2-4,6-9 and 14-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 2-4,6-9 and 14-17 would be allowable because the prior art of records (USP. 5,436,550) fails to teach or suggest a booster comprises an AND gate as called for in claim 2; resistors and diode as called for in claim 6 and 14.

Conclusion

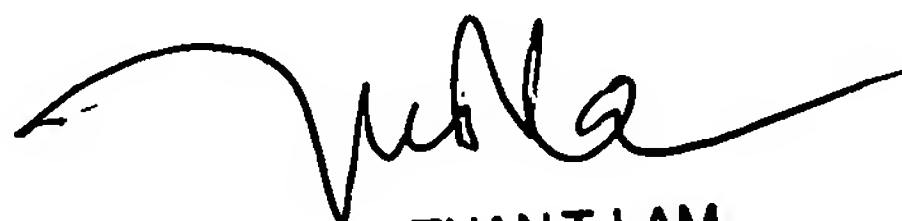
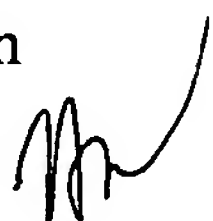
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

10-14-05



TUANT.LAM
PRIMARY EXAMINER